Economics focus: Predicting exchange rates



ECONOMIC FOCUS

Better than guesswork?

Economic forecasts of every kind are pretty unreliable—but few more so than forecasts of exchange rates

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IF YOU want to predict inflation, as any central bank must if it is to get its monetary policy right, one of the main things you would like to know is the future path of the exchange rate. The more open your economy is, the more your inflation forecast depends on this. It is a pity, because forecasting exchange rates is probably more difficult than forecasting any other macroeconomic variable.

Broadly speaking, there are four approaches. The first and simplest says: assume the exchange rate a year from now will be the same as it is today. This, to use the technical term, is the random-walk hypothesis: the probability of a rise in the exchange rate is the same as the probability of a fall. The fancy name does nothing for this method's forecasting ability, which is bad.

The second approach starts from the idea that financial markets are efficient. Suppose a safe dollar-denominated bond is paying 5% a year, and that a safe sterling-denominated bond is paying 7% a year. The market evidently assumes that the total dollar (or sterling) return on these bonds will be the same; otherwise, the interest rate on the bond which is expected to earn less, after allowing for changes in exchange rates, would rise to compensate. Implicitly, then, the market is expecting the dollar to appreciate against sterling by 2% a year—sufficient to equalise the total returns, or, in the jargon, to achieve uncovered interest parity (UIP). It makes perfect sense. It is a lot cleverer than the random-walk idea. It is if anything even worse at prediction.

The third approach asks what change in the exchange rate will be required to move the economy closer to equilibrium, defined mainly in terms of achieving a sustainable balance of payments (the meaning of "sustainable" is another question). Whether this fundamental-equilibrium-exchange-rate (FEER) method is really a forecasting technique (for working out what will be) or a claim about what is desirable (what should be) is another moot point. Anyway, FEERs yield poor forecasts.

The fourth approach is to look at an even more fundamental concept of equilibrium, based on the idea that exchange rates should move to equalise prices in different currency areas. This method is concerned with parity in purchasing power (PPP) rather than in the returns on financial assets. You would expect it to work in the longer run rather than the short run, and in that case it could be consistent with UIP. It works tolerably well in the (very) long run, but is virtually

useless in the short run.

In a public lecture last month, Sushil Wadhwani of the Bank of England's monetary policy committee (which sets British interest rates) suggested yet another procedure*. His intermediate-term model-based equilibrium exchange rate (ITMEER: you're nowhere in this business without an acronym) essentially combines the UIP and FEER approaches. It says that exchange rates move to reflect interest differentials plus a risk premium, which in turn is influenced by the sorts of variables that FEER advocates would use in their models and also by an assortment of asset-return differentials (such as differences in dividend yields). Because this method encompasses, or "nests", UIP and FEER, it can recognise them as special cases: if either of those models is true, the data will say so when they confront the ITMEER equation.

ITMEER does quite well, considering. It explains more of the variation in exchange rates than the other methods (although its estimated links between currencies and the various explanatory variables are statistically fragile). Exchange rates, ITMEER says, are drawn, albeit waveringly, towards an equilibrium level. Interest-rate differentials are less powerful than UIP suggests; and the current-account balance is weaker than FEER says. Unemployment, which followers of FEER maybe should have included in their models but mainly have not, matters more. An increase in unemployment depreciates the exchange rate—and directly, not merely indirectly through its effect on interest rates.

As Mr Wadhwani explained, all this matters more than one wishes it did. At the moment the pound is significantly overvalued with respect to the euro according to PPP and FEER. UIP also predicts that sterling will fall, because British interest rates are higher than euro interest rates. This assumption feeds into the Bank's inflation forecast. According to ITMEER, however, the pound may stay about where it is. The pound rose against the D-mark, according to ITMEER, partly because German unemployment went up relative to British unemployment: this weakened the D-mark because it implies that Germany's underlying current-account position is worse, and because, to the extent that it reflects a worsening of supply-side conditions in Germany, it will discourage inward investment.

Tentative conclusion: the pound may stay strong, inflationary pressures are weaker than they seem, and the Bank can be a bit more relaxed when it comes to setting interest rates.

Ah well, says Mr Wadhwani, none of these models is to be applied mechanically—how right he is about that—and there are many other considerations and so on and so forth. No doubt. For once, though, the obligatory call for more research is worth heeding: the direct channel between unemployment and currencies seems to have been overlooked up to now, and Mr Wadhwani's results suggest that this is an omission that matters.

^{*}See www.bankofengland.co.uk/speeches/speech53.pdf

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